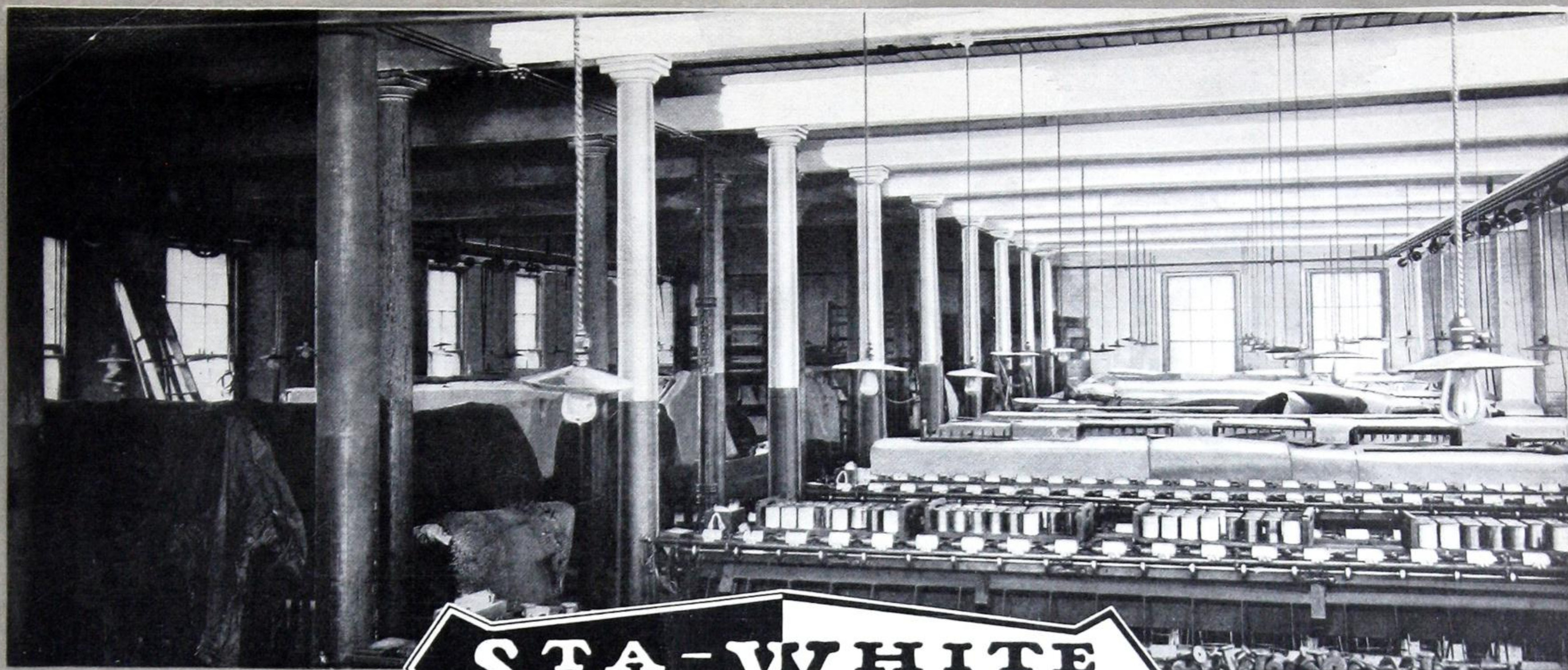


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*1508 Land Title Bldg  
Philad. Pa.*

# LIGHTING INDUSTRIAL INTERIORS

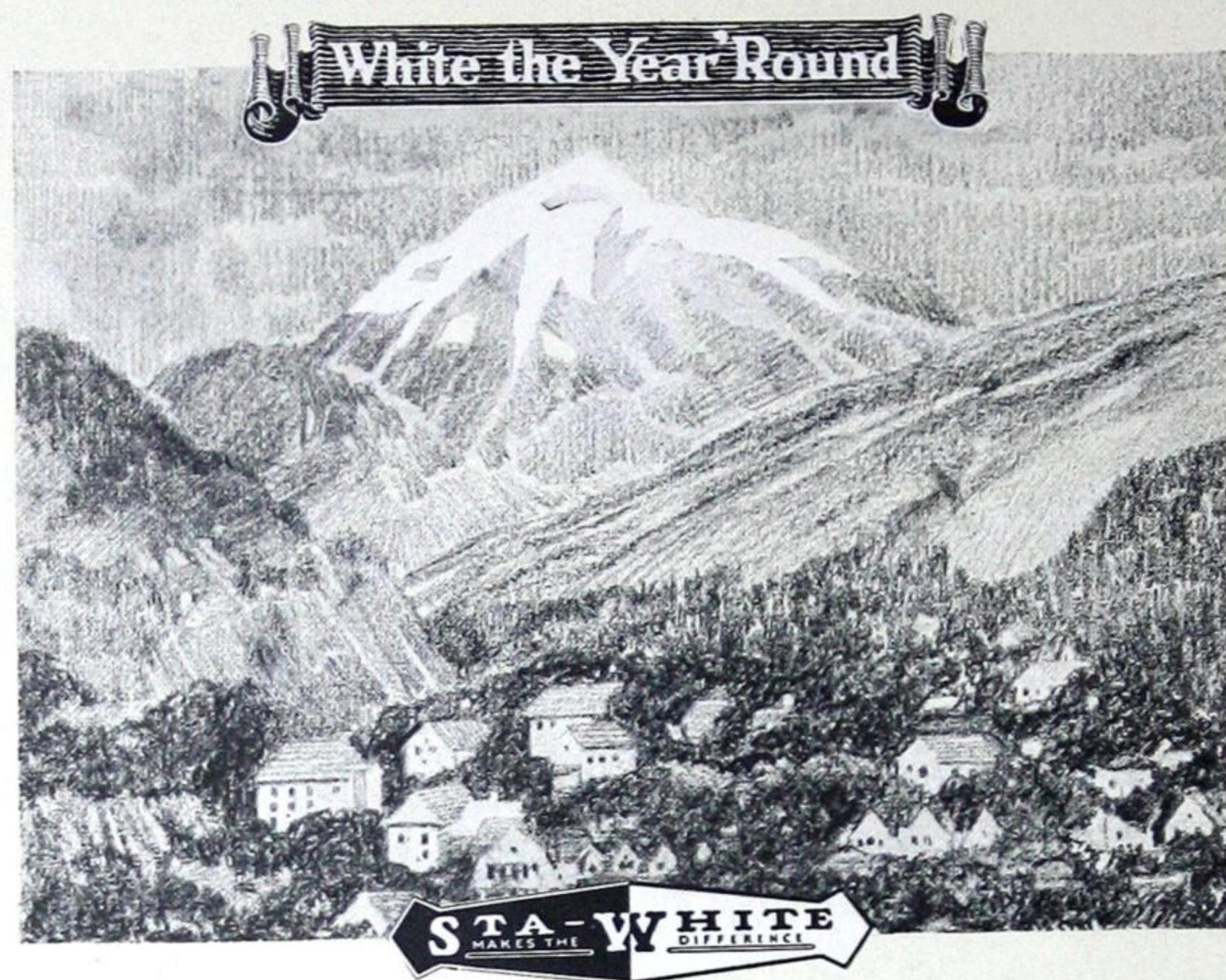
DETROIT GRAPHITE COMPANY

*Makers of*

Paints in all Colors for all Purposes

DETROIT, U. S. A.









## LIGHTING INDUSTRIAL INTERIORS

THE day of poorly lighted work-rooms has gone by the board. The old method of lighting—where lamps were strung low down over the machines, with the greater part of the plant in shadow—has been superseded, just as electricity has replaced the kerosene lamp.

Modern industrial plants don't countenance the stringing of lamps here and there on a nail or peg to best suit the operator, to be juggled into position that gives him most light.

A study of lighting arrangements best adapted for industrial plants has resulted in the adoption of many fixed principles by illuminating engineers and executives.

Good lighting is such that the workman is as unconscious of it as he is of daylight. That is to say, he does not give it a thought one way or the other.

While the necessity of good lighting is so evident that a list of its effects may seem commonplace, they are of such great importance in their relation to factory management that they are worth careful attention.

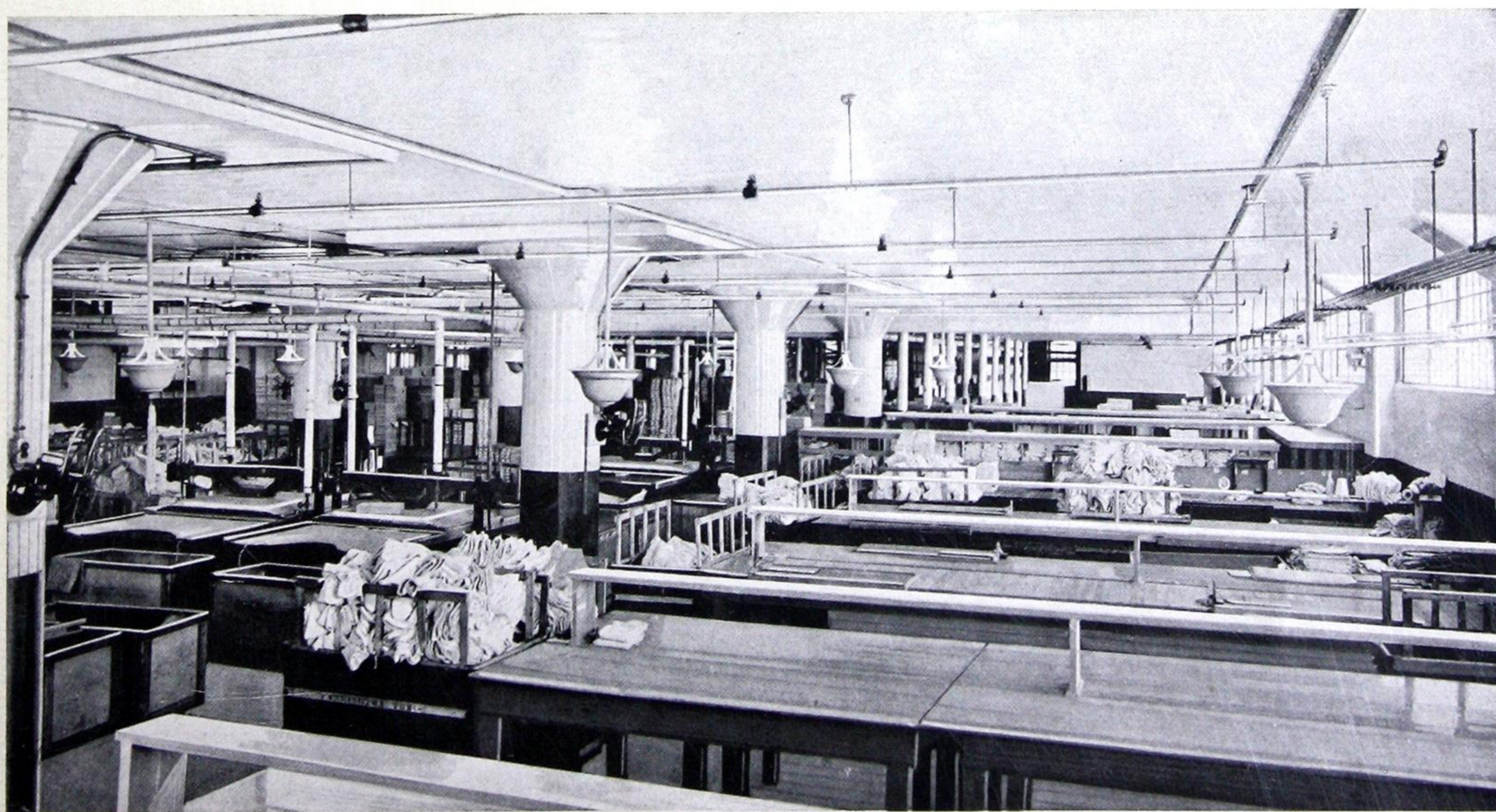
The effects of good lighting, of bright, cheerful surroundings in the workroom include:

1. Better working conditions.
2. Increased production.
3. Greater accuracy in workmanship.
4. Less spoilage.
5. Reduced bills for lighting.
6. Neatness and sanitation of plant.
7. Less eye strain.
8. Reduction of accidents.
9. Improved morale among employees.
10. Reduction in labor turnover.

Of all contributing agencies, it is a recognized fact that white paint that reflects and diffuses light is one of the most important factors in solving the lighting problem.

In the following pages we briefly outline some of the advantages of Sta-White—the pure white oil paint for industrial interiors.

Because Sta-White contributes so largely to efficiency, it is being used extensively by large and small manufacturing plants of





every description and in every part of the country.

The pictures reproduced are practical illustrations of the value of Sta-White.

### WHAT STA-WHITE IS

1. Sta-White is a pure white oil paint with unusual light-reflecting qualities.
2. It contains no lead, glue or other injurious ingredients.
3. Sta-White will not chip, flake or peel. It may be washed without injury to the finish.
4. Sta-White will give maximum service that is expected of highest grade interior whites, both as to light-reflecting qualities and durability.
5. Sta-White is a recognized leader in the field of mill whites. Its manufacture—backed by service records—prohibits its classification with paints that are made to fit a price.
6. Sta-White is made in high gloss enamel finish, although semi-gloss and flat finish are also furnished.
7. Sta-White can be used without the hazard of experiment.



DADO COLORS

For the lower portion of walls and pillars colors are furnished both priming and finishing coats. A few of the most popular colors are shown above, but any desired color can be furnished for dado.

### STA-WHITE IMPROVES LIGHTING

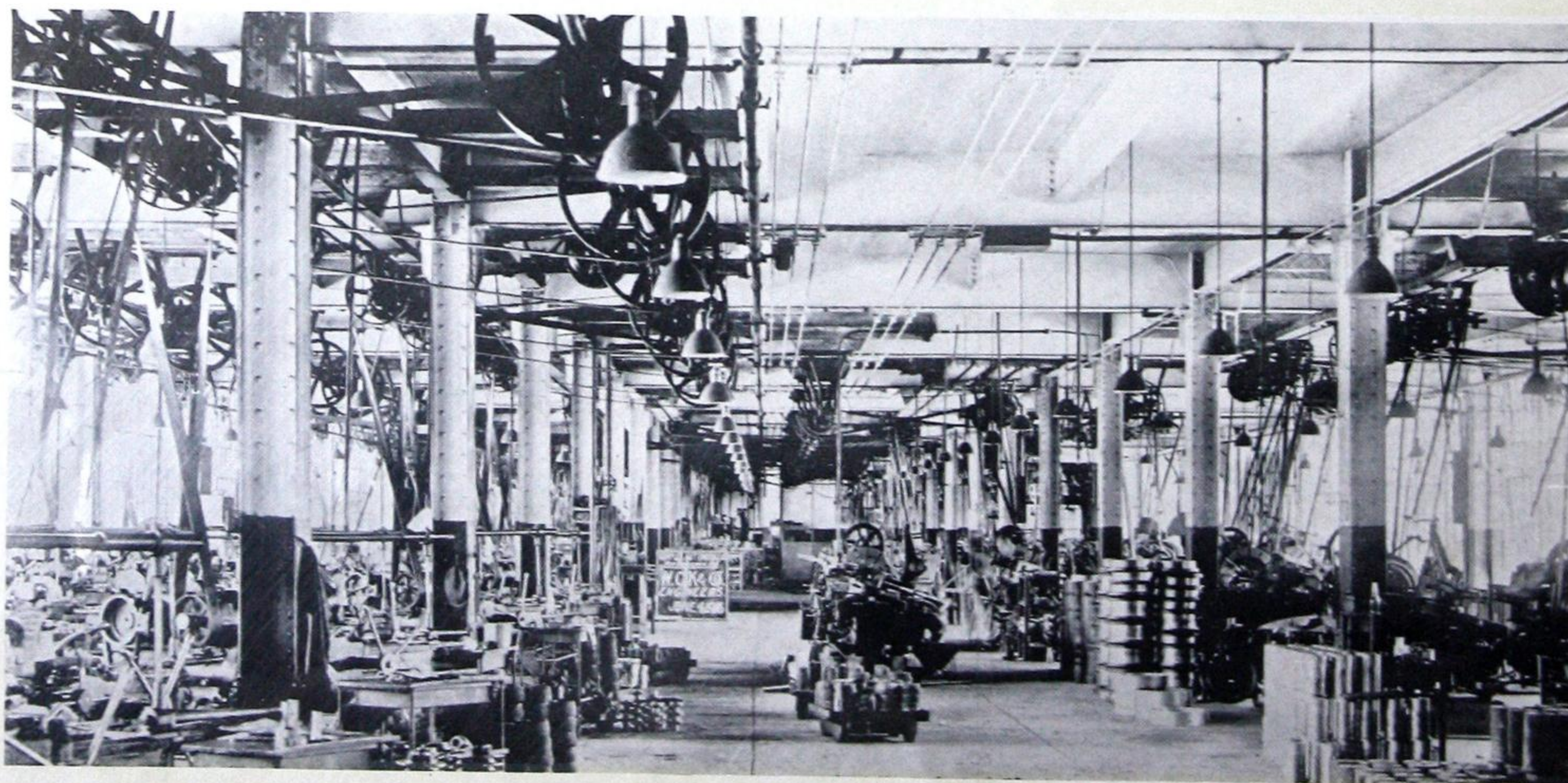
On page 1, we have listed the effects that are the direct results of good lighting.

Without discussing each effect separately, it is possible to list some of the advantages of Sta-White which help produce them.

1. Sta-White eliminates the dark corners. It utilizes all the light, and puts off the time for turning on artificial light until the latest possible hour. It increases and diffuses light by reflection.

2. The gloss finish of Sta-White, combined with a pure white tone, makes it highly light-reflecting. Evenness of tone insures uniform diffusion of light.

When, after a period of years, Sta-White becomes soiled, covered with dust or other settlements, the original whiteness and reflecting



*Use Sta-White—It stays white the year 'round*





**STA-WHITE**  
MAKES THE DIFFERENCE

*The above photographs are graphic proof that "Sta-White makes the difference." The pictures were taken under identical lighting conditions. Note the dark and dingy appearance of the workroom as shown in the picture at the left. Contrast this with the picture at the right taken after Sta-White was applied on the walls, ceilings and columns of this same room.*

qualities may be easily restored by brushing or washing, without injury to the finish.

It is an accepted fact that clean white walls are an aid to industrial efficiency.

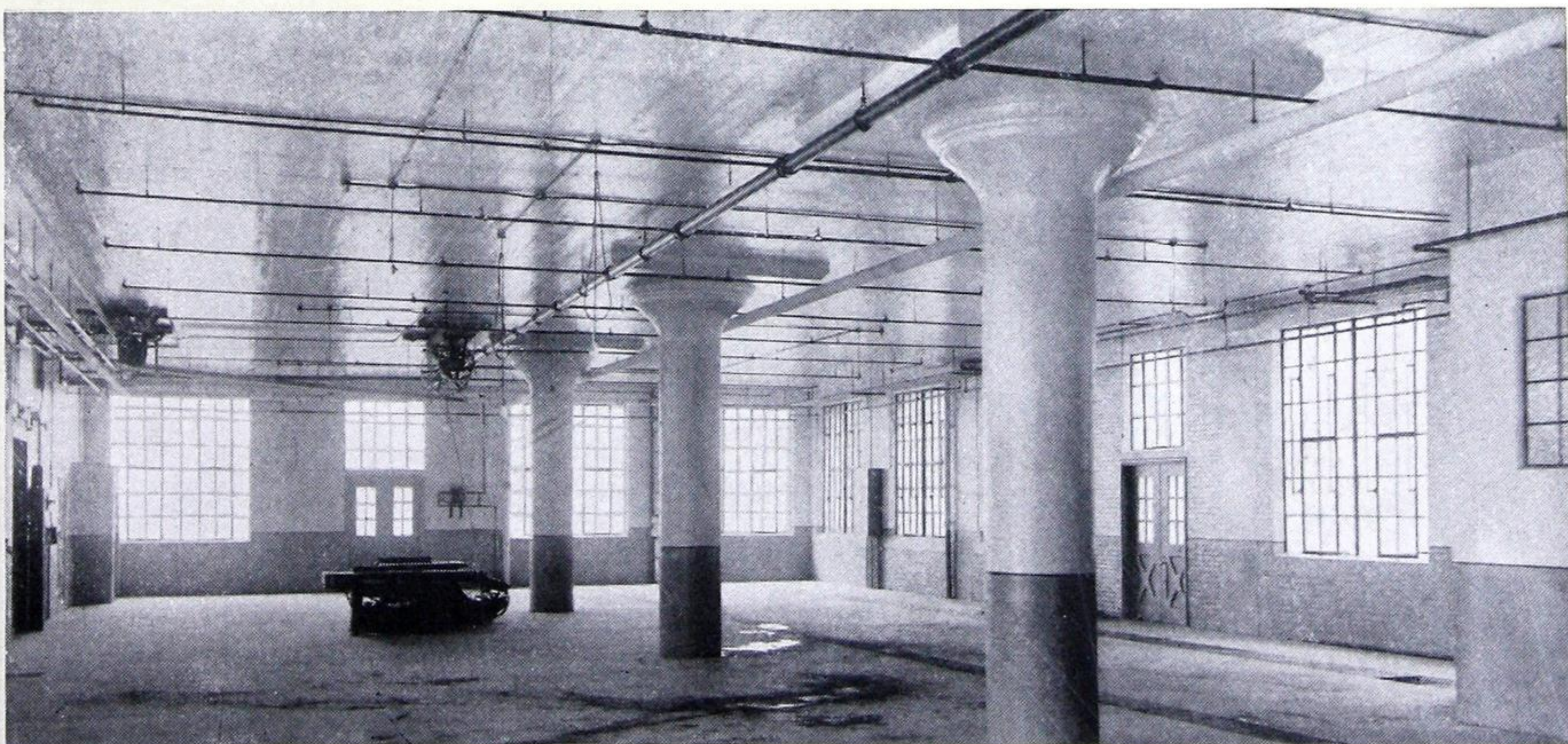
"Yes" the average man will say, "pure white walls are much better than dark and dingy walls."

There is no argument on this point among those who have studied the question. They

know that white walls reflect light, whereas dingy walls absorb it.

#### THE PRICE YOU PAY

There are so many elements to be considered in connection with the price of paint, that we are omitting discussion of the initial cost, based on material and labor for application, and going on to a discussion of those elements which constitute the ultimate cost.





### STA-WHITE VS. LOW GRADE PAINT OR UNPAINTED WALLS

The cost of Sta-White must be considered over a period of years, by reason of its proven durability which always makes for a low per year cost.

With unpainted walls or those coated with low grade paint, there is a maximum cost which is made up of cost of repairs; early repainting; cost of mistakes due to poor light; cost of idleness and accidents; cost of lack of efficiency; cost of excess artificial light.

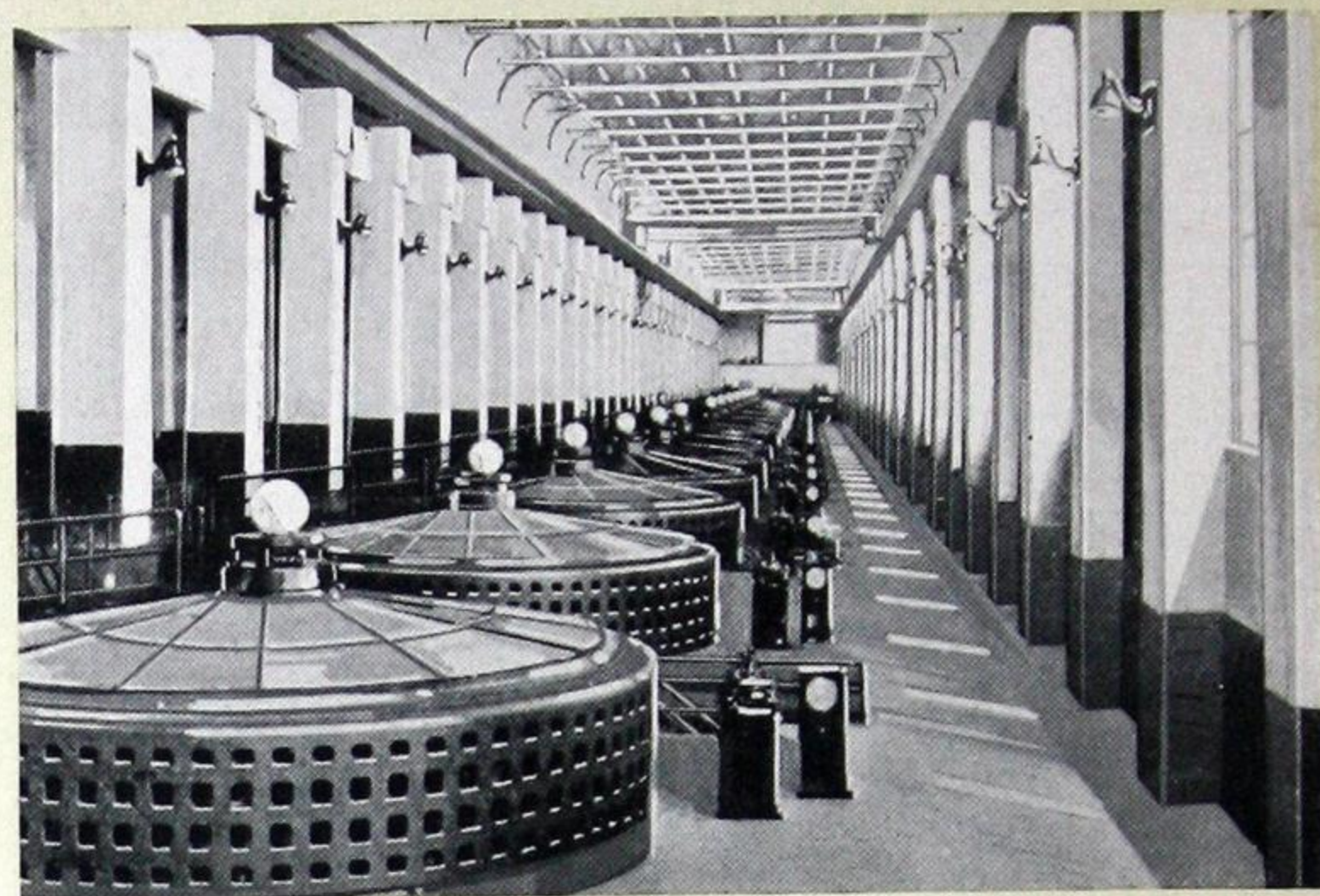
It is true that the initial cost of low grade paint is less than the initial cost of Sta-White, but the ultimate cost of low grade paint is invariably higher because its service is low.

### THE COST OF LOST PRODUCTION

In the dark and dingy plant, production is invariably below the true capacity of its equipment and workers. Much of this loss through under production is chargeable to poor lighting.

### THE COST OF ARTIFICIAL LIGHT

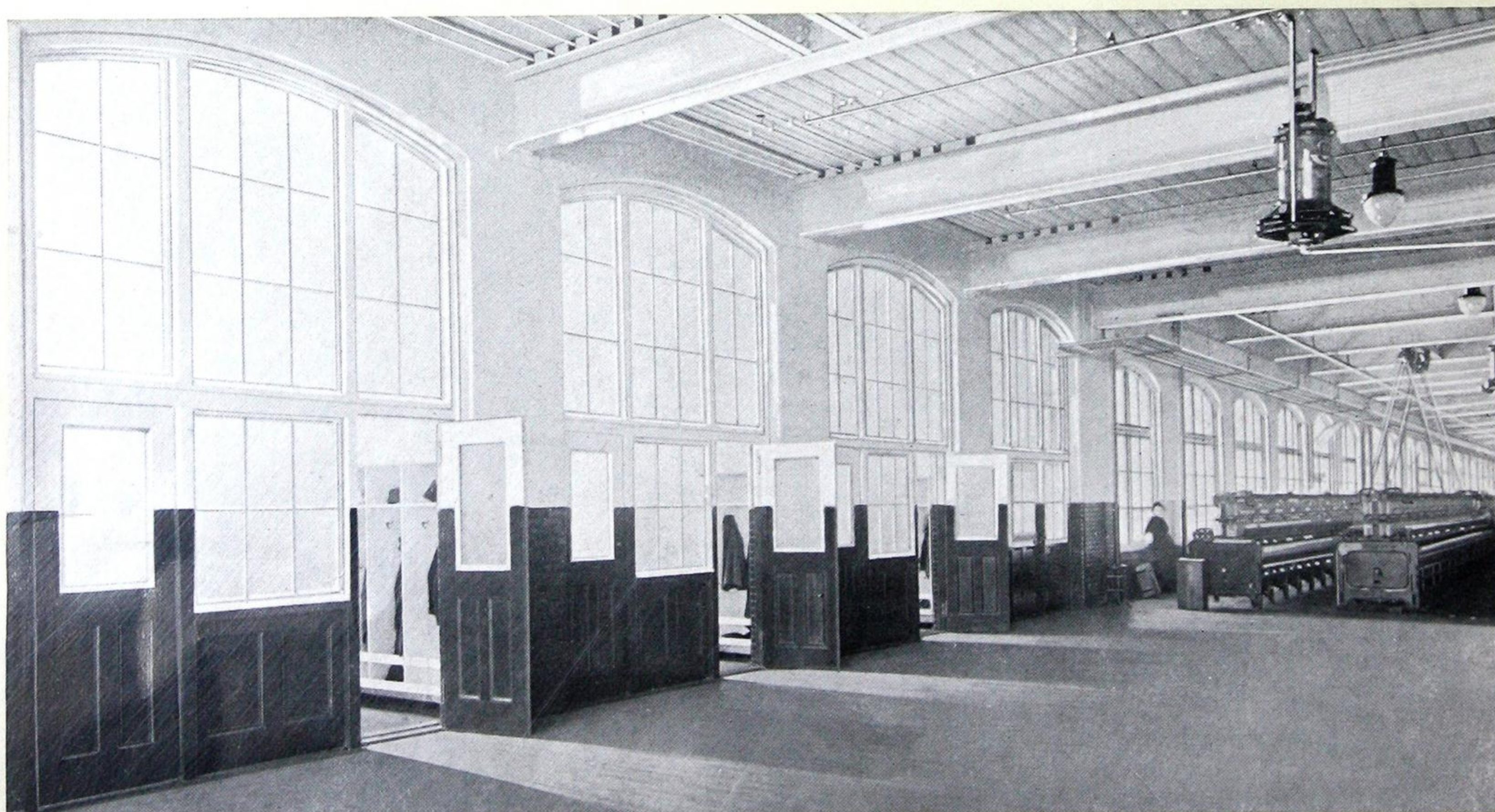
An authority on industrial lighting states that it takes four and one half times as much



electrical energy to light a plant with dingy walls as against the same plant when painted white.

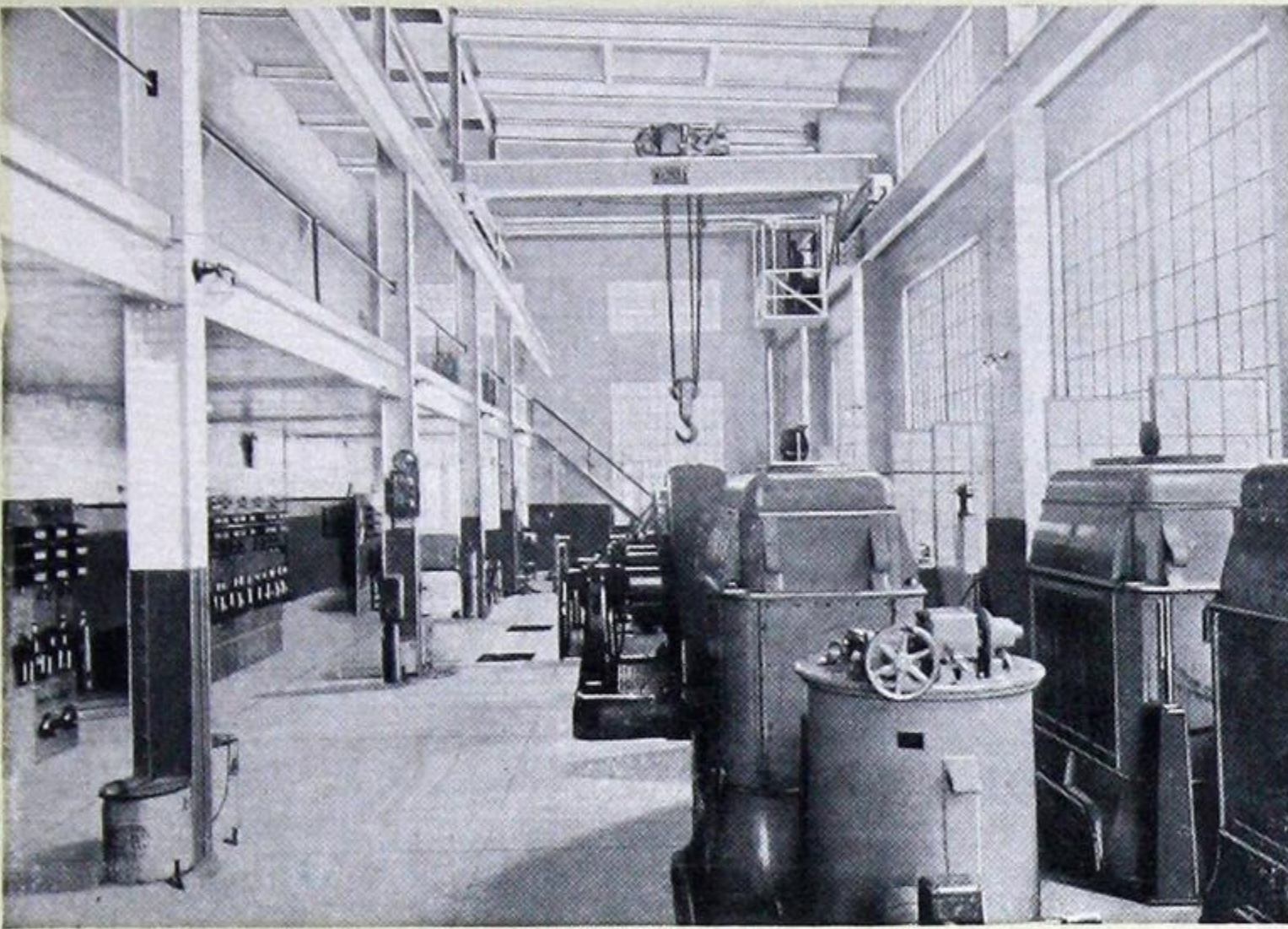
Therefore, the difference in actual cost between lighting a dingy interior and an interior painted with Sta-White represents a considerable saving that might well be subtracted from the initial cost of Sta-White.

A plant that is painted with Sta-White also has the advantage of a longer day, because Sta-White reflects and diffuses light, makes use of all the light as long as daylight lasts.



*Use Sta-White—It stays white the year 'round*





### THE COST OF SPOILAGE

Report of the U. S. Census Bureau states that the gross spoilage of American factories per year is approximately \$150,000,000 and that \$20,000,000 of that amount is due to poor and inefficient lighting.

### THE COST OF LABOR TURNOVER

In the case of two factories engaged in the same line of work, the U. S. Census report further states there was 70% less labor turnover in the one painted with good white paint than the other which had dingy walls and ceilings.

The high-type employee today is inclined to stick where working conditions are ideal. So improved lighting, improved appearance, sanitation and cleanliness make for a saving in labor turnover.

### THE COST OF ACCIDENTS

Most accidents in factories occur late in the afternoon when the light begins to wane, or in the early hours of the day and at the time when light is at its worst.

### THE ECONOMIC VALUE OF ACCIDENT PREVENTION

There is no other factor which contributes more towards accident prevention and safety of employees than good lighting.

The relation of light to industrial accidents is covered in the following paragraphs re-

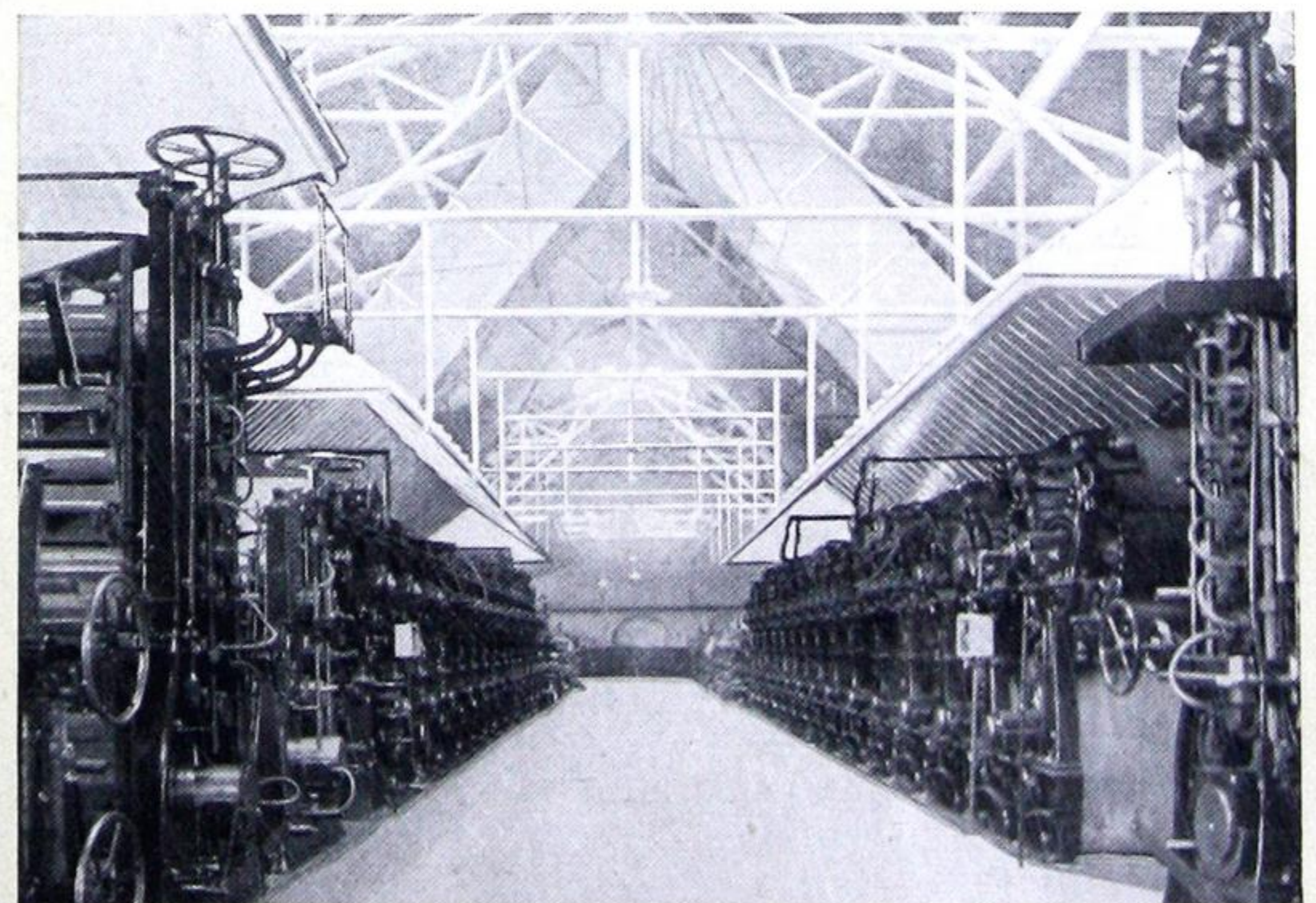
printed from the National Electric Light Association's book—Modern Industrial Lighting.

"Statistics bearing upon industrial accidents, in which operatives or machinery both suffer, closely parallel the figures touching spoilage. Spoilage or 'seconds' may by the critical be said to be due to carelessness, bad feeling among operatives, or a false economy upon the part of employers in entrusting machines and materials to ignorant or untrained help. But serious personal accidents have a deeper cause, and when the two forms of accidents are found to increase with the days of diminishing daylight and to decrease as the daylight hours lengthen, it is obvious that light is a factor in reducing both.

"A prominent official of one of our largest manufacturing companies is authority for the statement that *'insufficient illumination'* is frequently held by juries to be *'contributory negligence,'* and in the defence of accident suits the lawyers of this company make it a point to offer testimony by a competent witness to prove the adequacy of the lighting in this company's plants.

"The subject is nowhere considered from any humanitarian standpoint: that is something which each manufacturer must face individually.

"We simply point out that *each serious accident completely demoralizes a shop;* that this



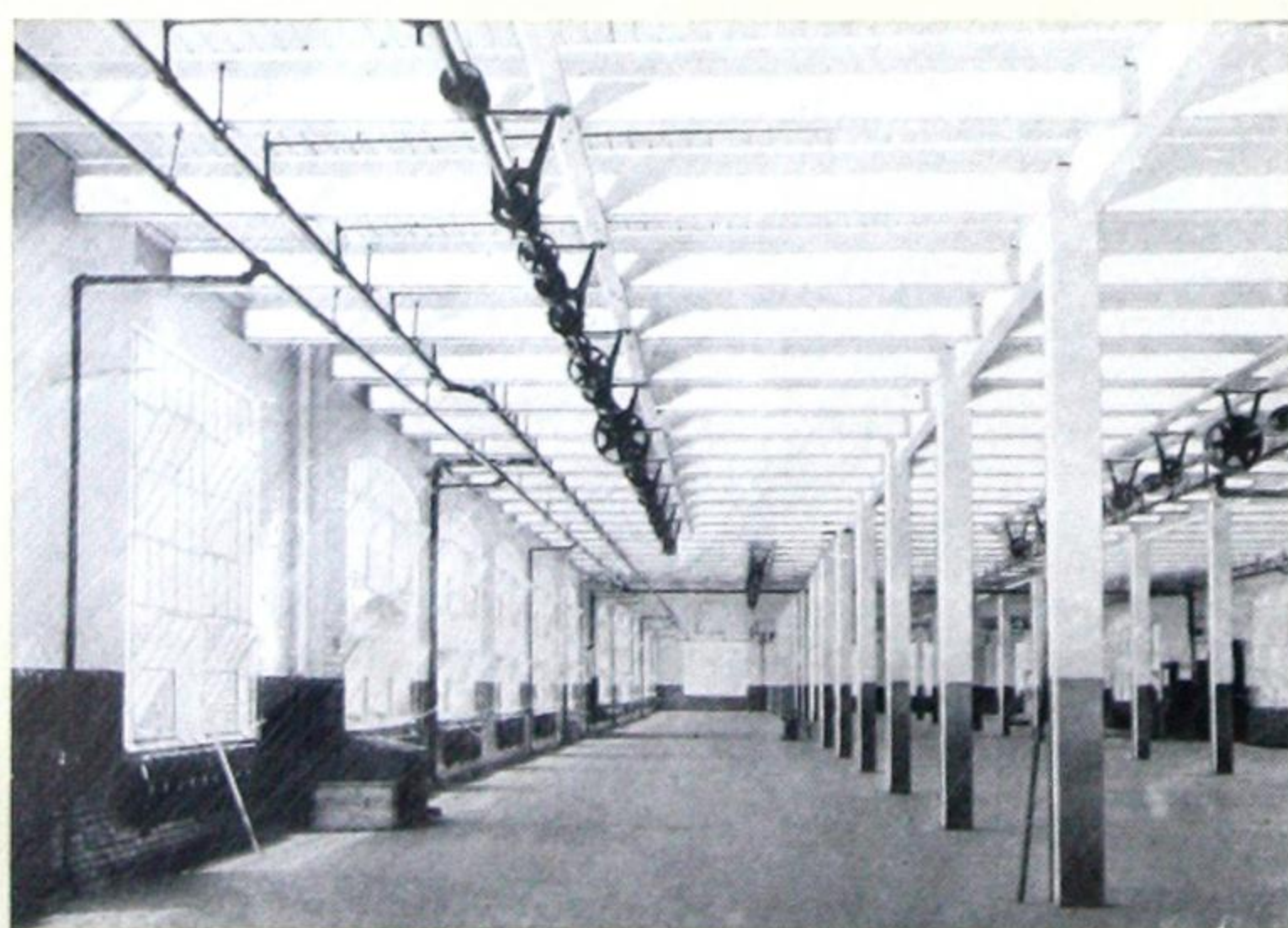




600,000 square feet of  
ceilings and pillars



demoralization may last for a day or a week; that during this period of distress and excitement the operatives are inefficient and expectant of further trouble; that production drops, while spoilage and 'seconds,' due to nervousness, increase; that the absence of employees is greater, and that the whole spirit and morale of the plant is broken down. Facing these facts, we begin to see an economic advantage in accident prevention. As to how to accomplish this most cheaply, the authorities on industrial accidents and safeguards for operatives declare that *good illumination would prevent approximately 25 per cent of the avoidable accidents.*



"Two charts, shown on opposite page, tell graphically the story of loss and suffering which result from inadequate light. In the one we see the ratio between darkness, cloudiness, and sunlight in the city of New York. In the other is set forth the 'curve' of fatal industrial accidents of three successive years *as reported from 80,000 industrial plants.* Analyze these charts in the light of the statement of the Fidelity & Casualty Company that '*the greatest number of accidents occur during the months of diminishing light,*' and it will be acknowledged that illumination is sadly under-rated as a means of accident prevention. It is not, however, lost sight of by those who have much experience in dealing with the legal aspects of accidents."

### THE ECONOMIC VALUE OF SANITATION

The modern industrial plant strives for cleanliness and sanitation throughout the workrooms. Plant executives appreciate the money-saving value of clean white walls from a standpoint of increased production which naturally follows improved morale and content among employees.

Furthermore, the bright, cheerful atmos-





erior surfaces—walls,  
ed with Sta-White.

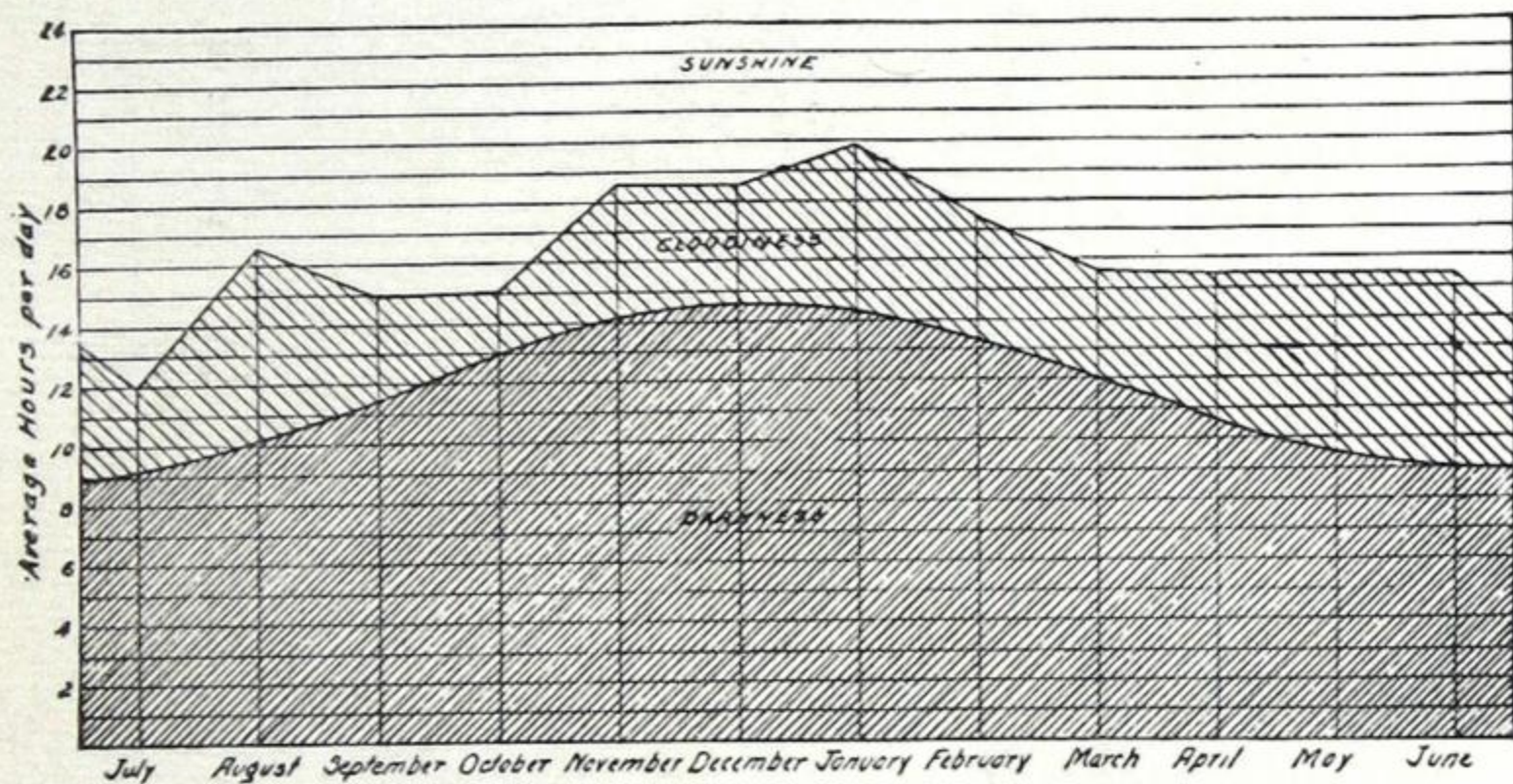
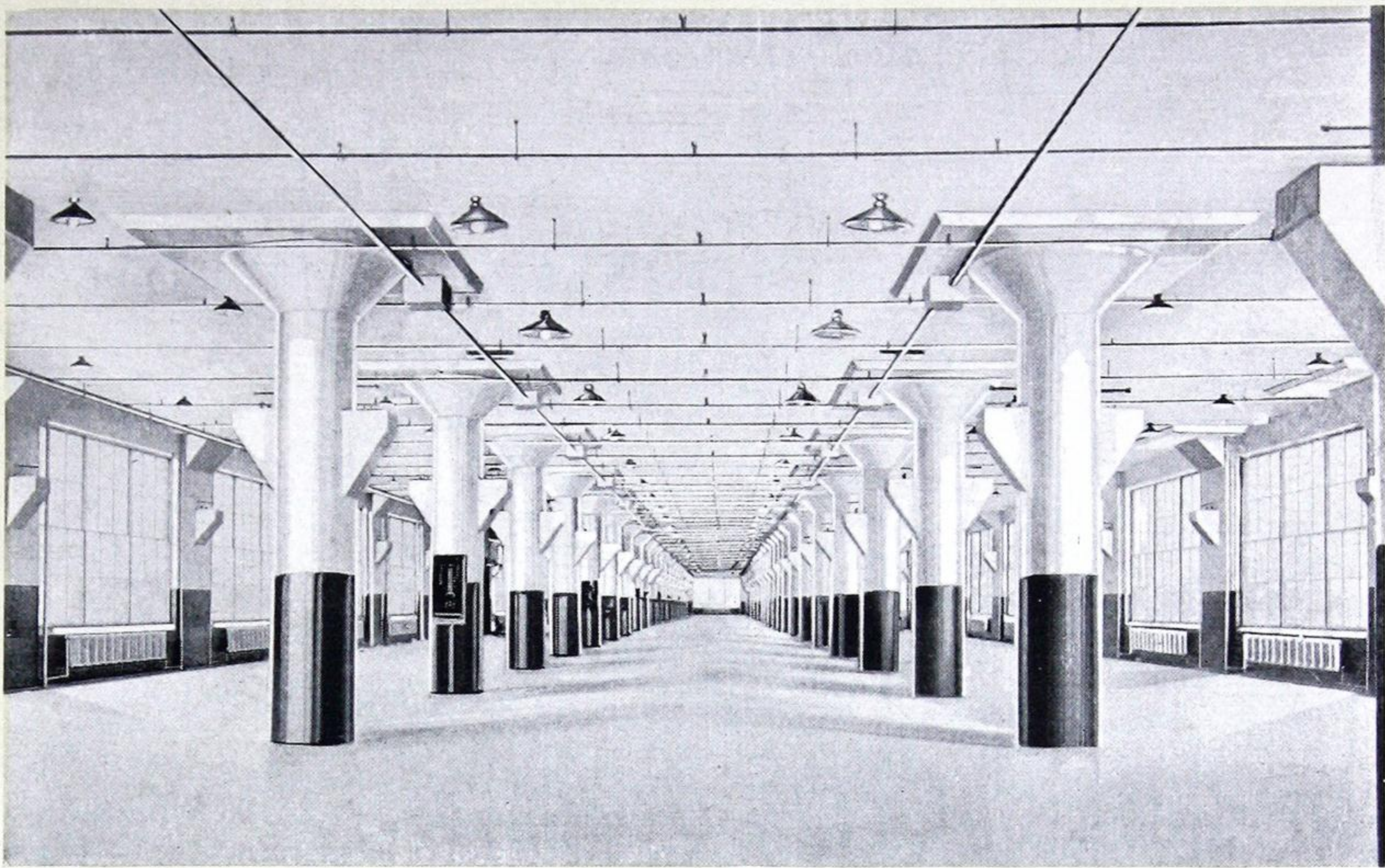
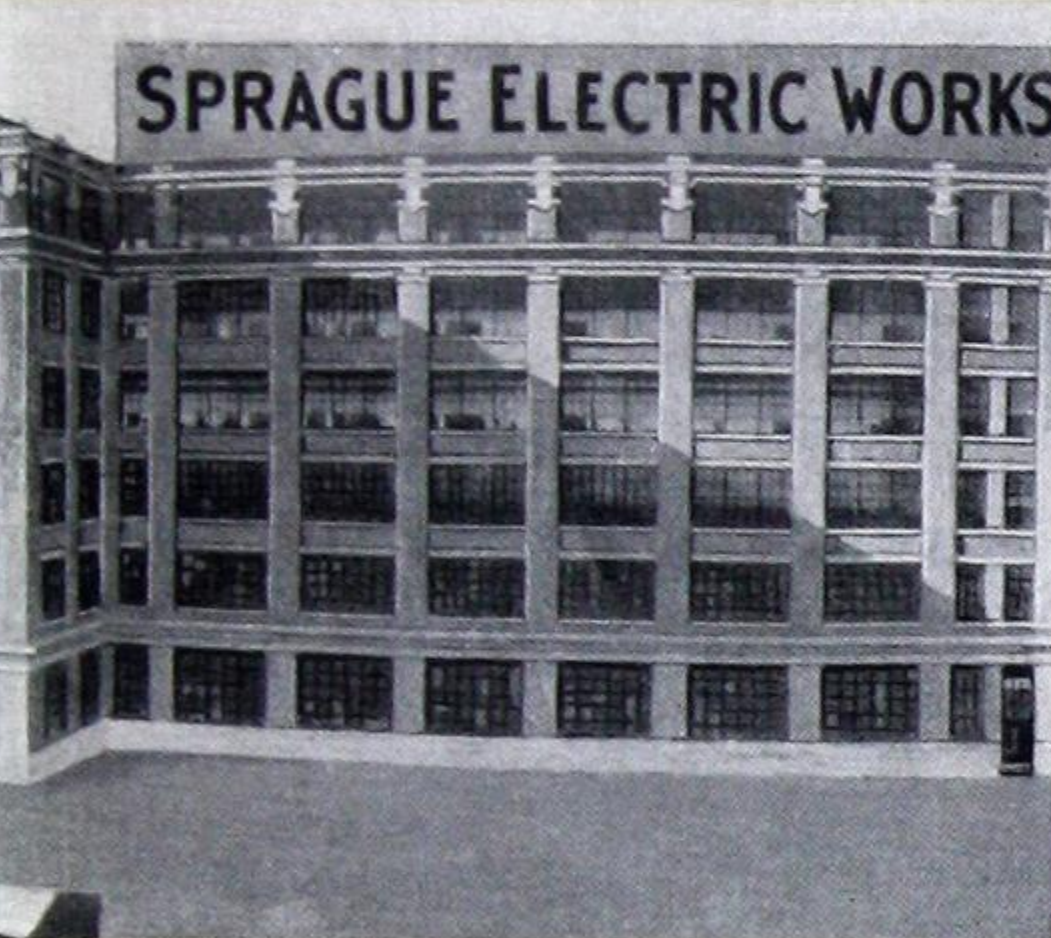


CHART SHOWING AVERAGE HOURS PER DAY OF SUNSHINE, CLOUDINESS AND DARKNESS FOR EACH MONTH DURING 1910. NEW YORK CITY

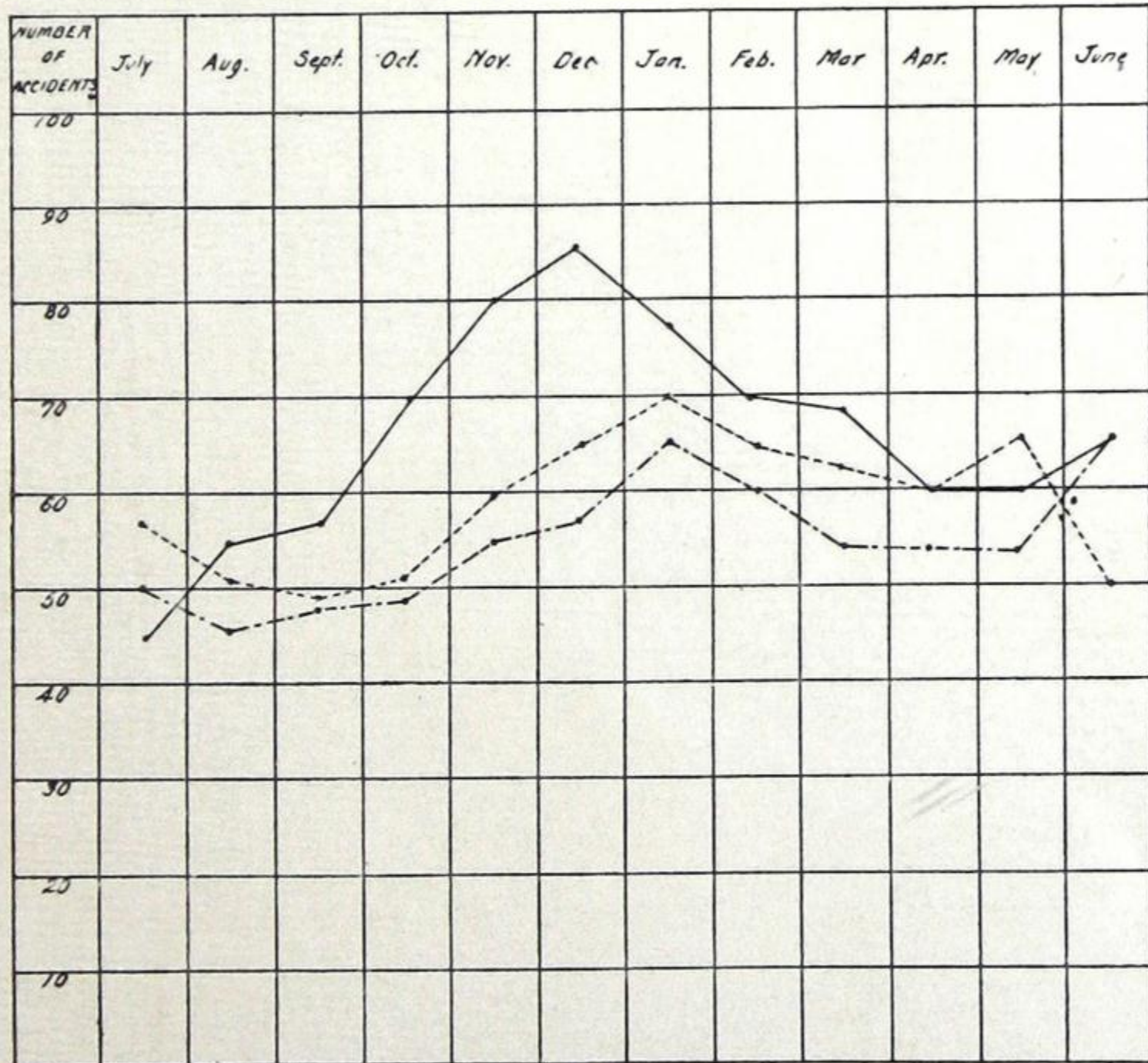


CHART SHOWING THE SEASONAL DISTRIBUTION FOR THREE SUCCESSIVE YEARS OF ABOUT 700 DEATHS ANNUALLY FROM INDUSTRIAL ACCIDENTS REPORTED FROM AN AREA EMBRACING 80,000 PLANTS (NOTE SIMILARITY OF CURVES IN FIGS. 1 AND 2)

phere secured through the use of Sta-White creates a desire on the part of the worker to keep the plant in ship-shape order.

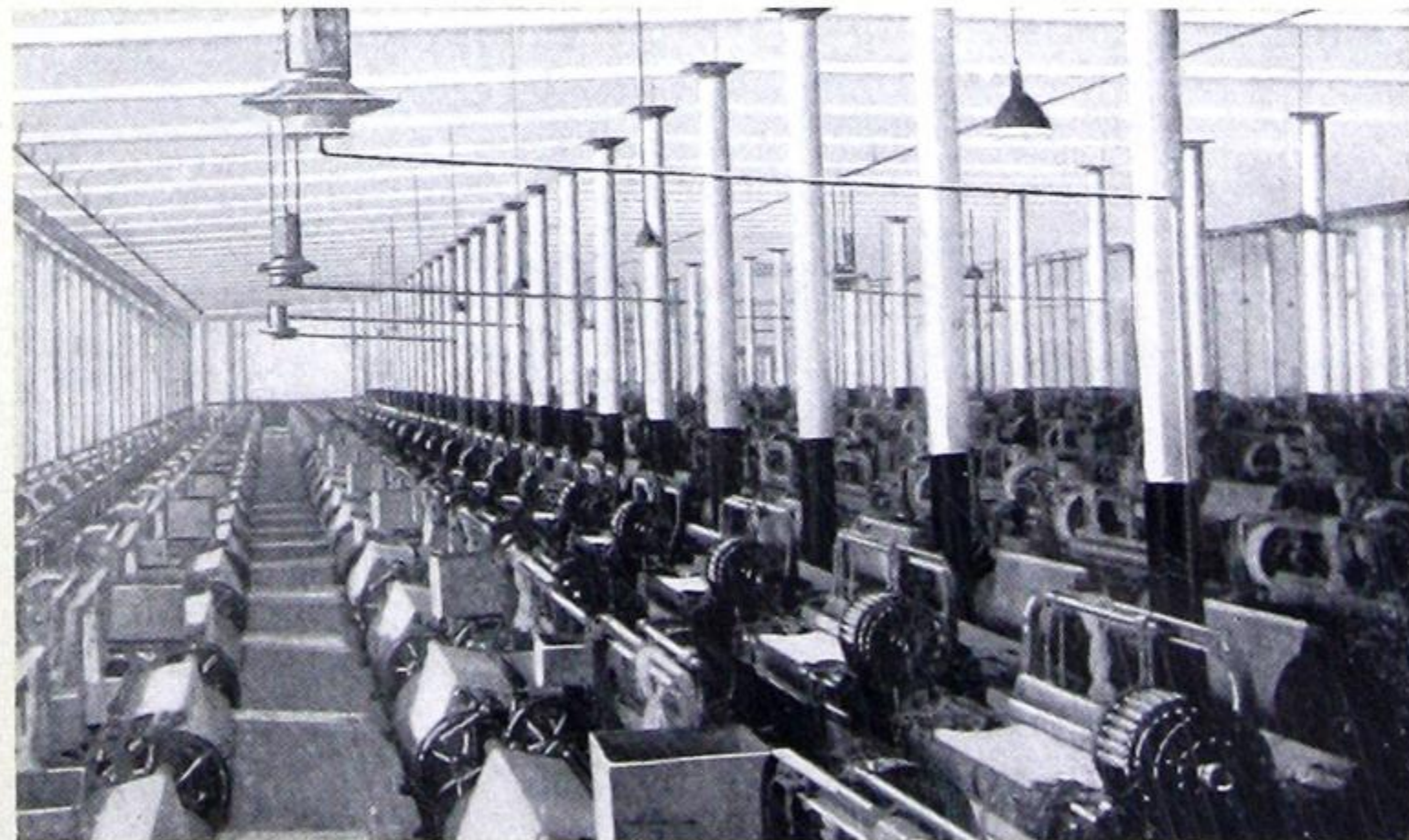
If you are interested in maintaining the health of your employees, your plant should at all times be clean and sanitary.

Sta-White is strictly a sanitary paint. It is easy to keep clean.

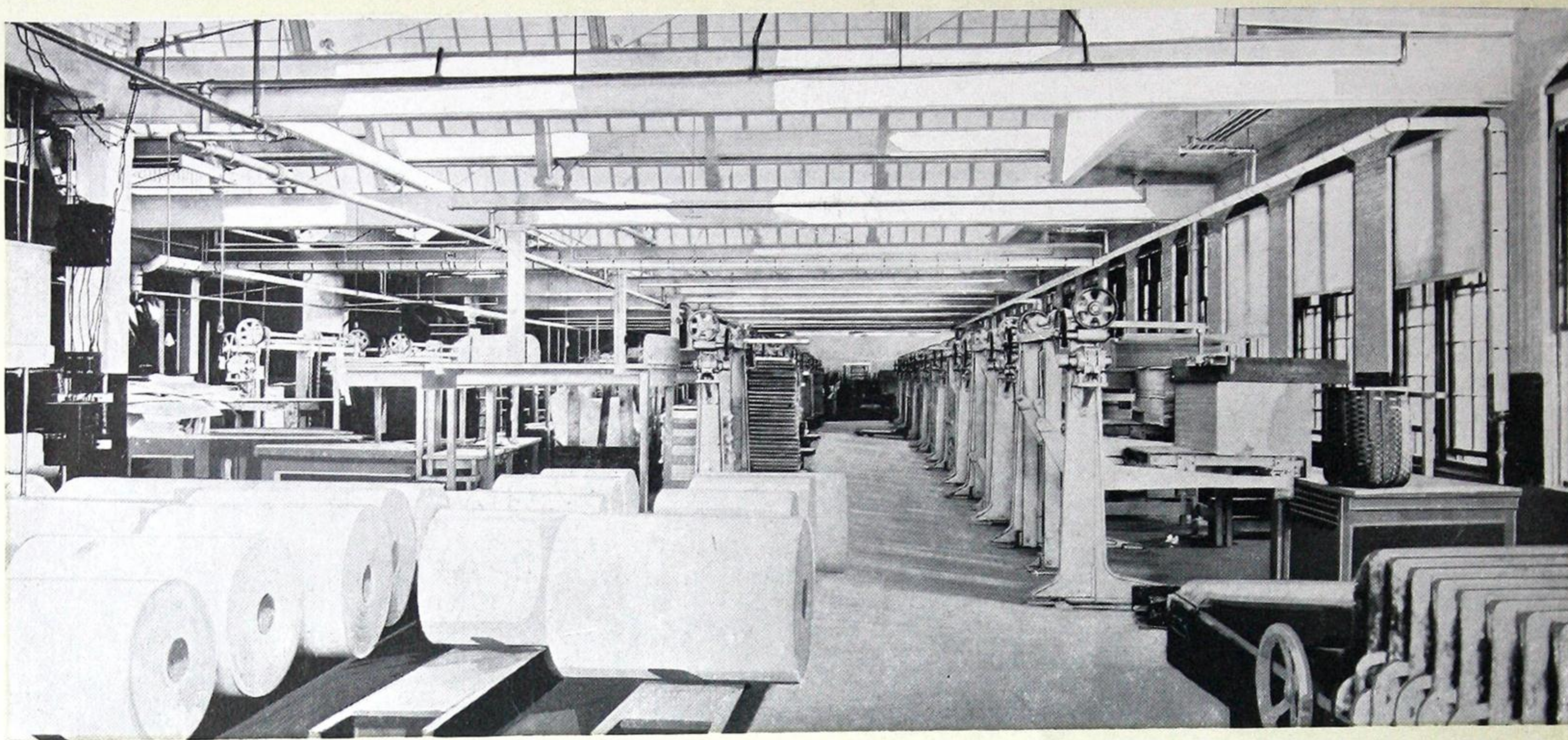
### TRUE ECONOMY

In the management of business—in the supervision of purchases and expenditures, the true economist builds for the future. His first consideration is the ultimate cost.

Money spent for supplies, for labor, for equipment, brings back its fullest value only when high quality and proven worth have been the dominant factors in its selection.







The purchase of any commodity calls for consideration of proven quality, durability, and reputation of the manufacturer back of the product.

These are the fundamental factors which draw the line between initial saving, or low first cost, and true economy.

Sta-White—the pure white oil paint for industrial interiors—while often costing a bit more than some paints at the start, eventually costs less.

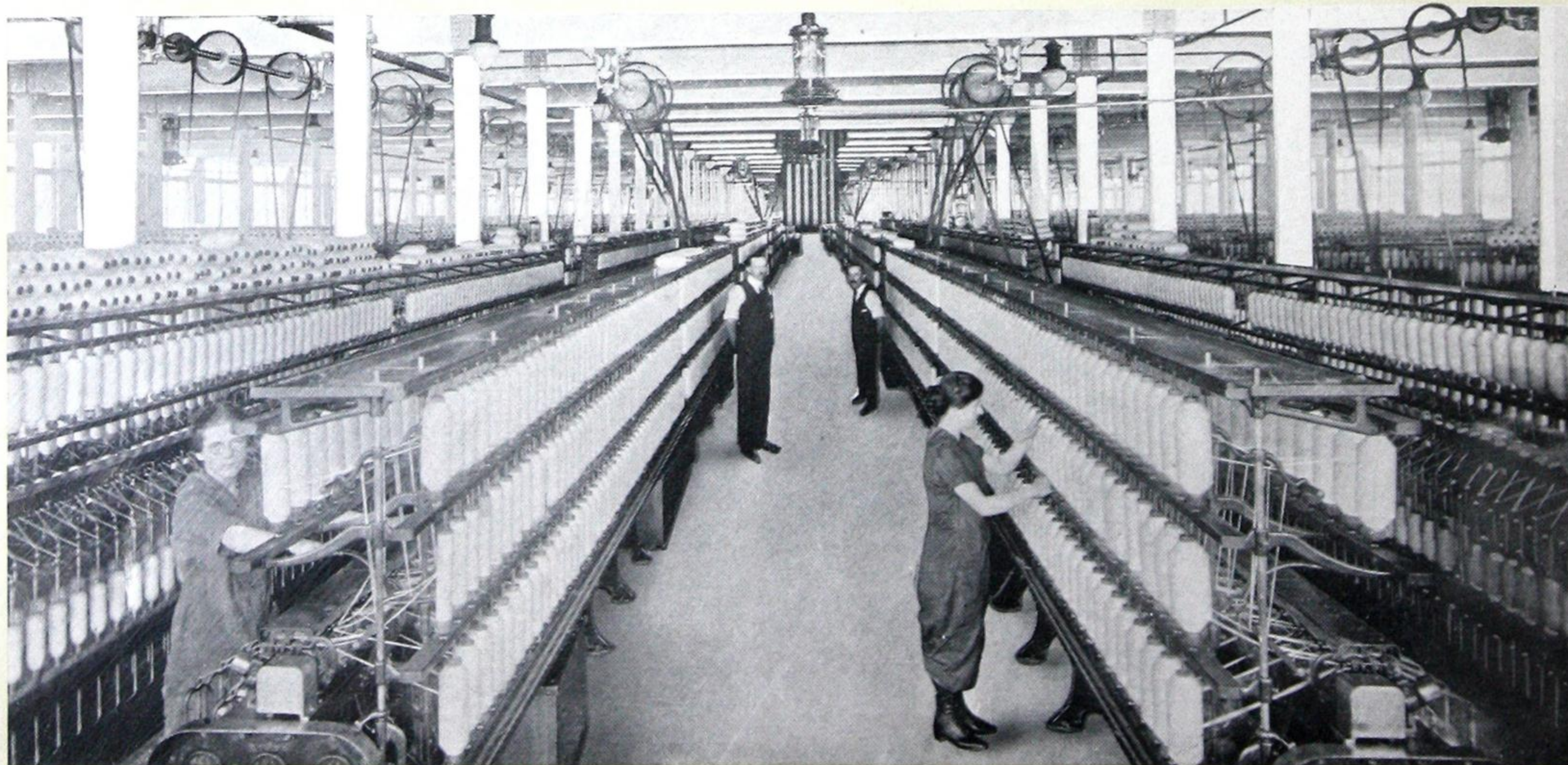
It is true economy to consider Sta-White in the light of **ULTIMATE** cost, based on the savings and advantages enumerated above.

#### YOUR PAINT REQUIREMENTS

When you paint it will pay you to specify that paint which is *made right*.

Just mixing materials will not produce a good, serviceable Mill White even though the pigments and oils used are of high quality.

Sta-White—the pure white oil paint for



*Use Sta-White—It stays white the year 'round*





industrial interiors—is manufactured under a proven formula—the result of years of study, experience and tests.

There are seven essentials of manufacture and application that produce maximum service and satisfaction in mill white paints:

1. High grade raw materials.
2. A formula, proven in service.
3. Ease of application.
4. Excellence of finish.
5. It must stay white.

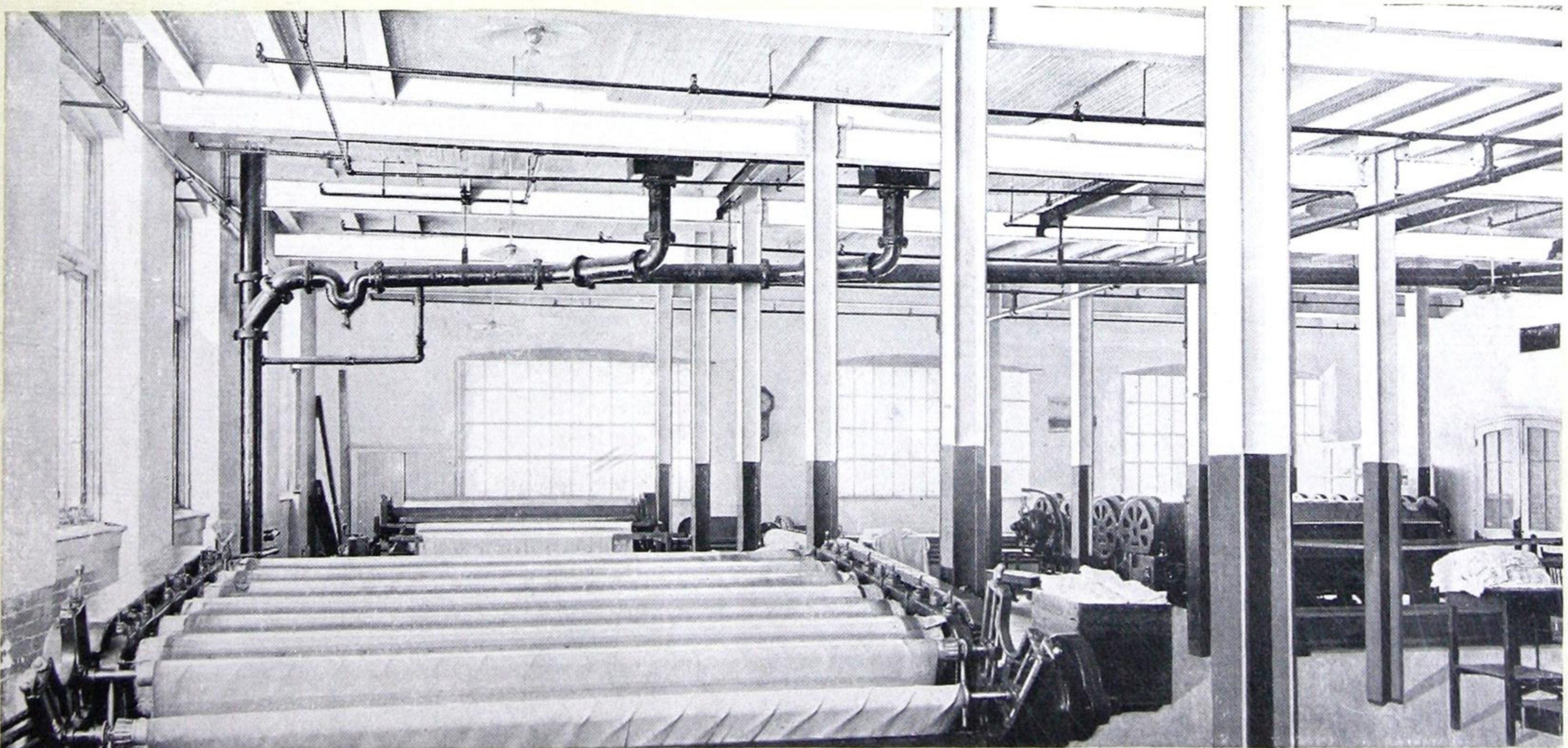
6. Good spreading qualities.

7. Durability.

Sta-White has all these prime essentials.

Sta-White has advantages worthy of your consideration because it has a demonstrated value—its high quality and durability have been proven in service over a long period of years in thousands of factories and plants through-out the country.

For utmost service and efficient lighting you need Sta-White.







### THE PAINT YOU BUY

No reputable manufacturer will lay claim to high quality of his product until it has made good in service.

The true worth of paint is demonstrated only through its application and use.

Back of Sta-White stands the record of the Detroit Graphite Company as makers of good paints for over 30 years.

#### REFLECTING EFFICIENCY OF PAINT

White (Sta-White).....	100%
Light Green.....	53%
Light Yellow.....	49%
Light Buff.....	44%
Light Grey.....	27%
Brown.....	6%
Red.....	5%

If you buy Sta-White there is definite assurance that you will get full value for your money. If you buy low grade paint, or paint of unknown merit—or do not buy paint at all, you will be paying for Sta-White through inconvenience and inefficiency due to lack of service which Sta-White gives.

It is the part of wisdom to get what you are paying for. When you buy low grade paint, or do not buy at all, it means a loss just as truly as though you took the money out of your pocket.

**TRUE ECONOMY** means that you should select for your work the paint that has proven its worth in service. Its use will mean utmost satisfaction with a low ultimate cost.

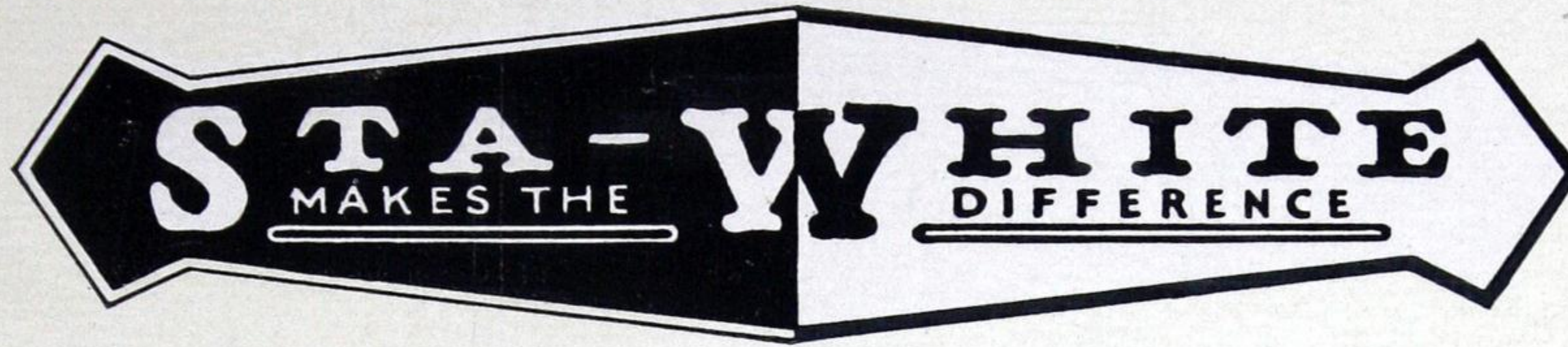
When you paint it will pay you to remember Sta-White. It can be used without the hazard of experiment.

## DETROIT GRAPHITE COMPANY

Makers of  
Paints in all colors for all purposes  
DETROIT, U.S.A.

*Use Sta-White—It stays white the year 'round*



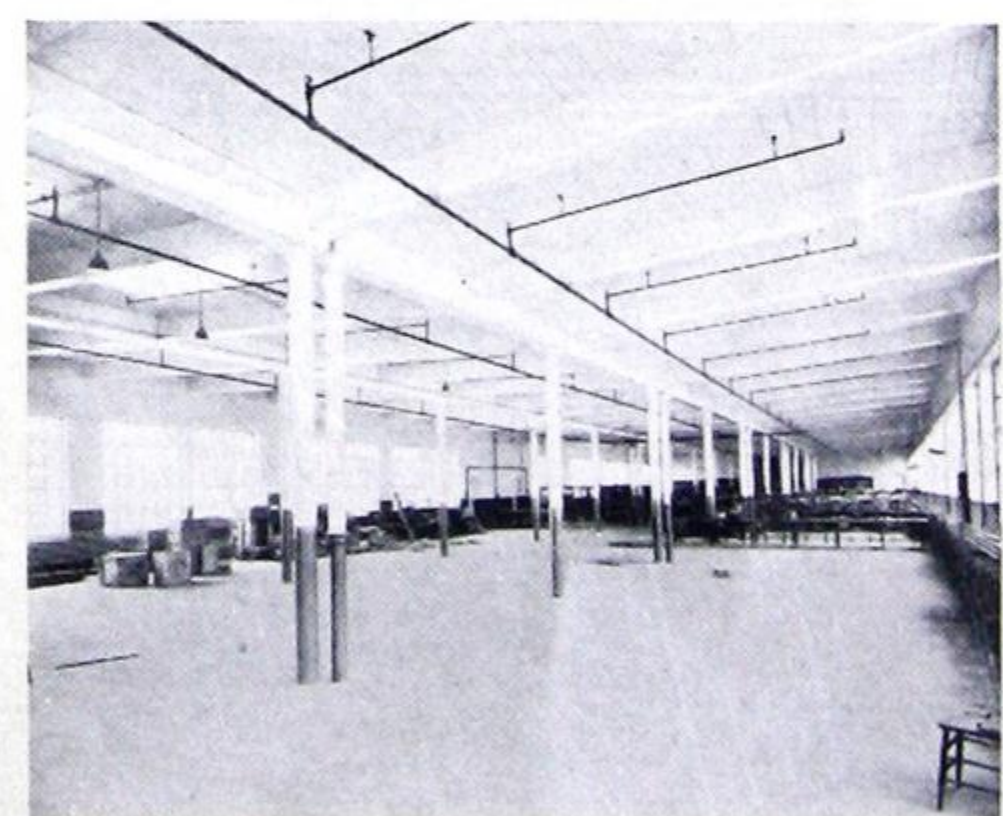
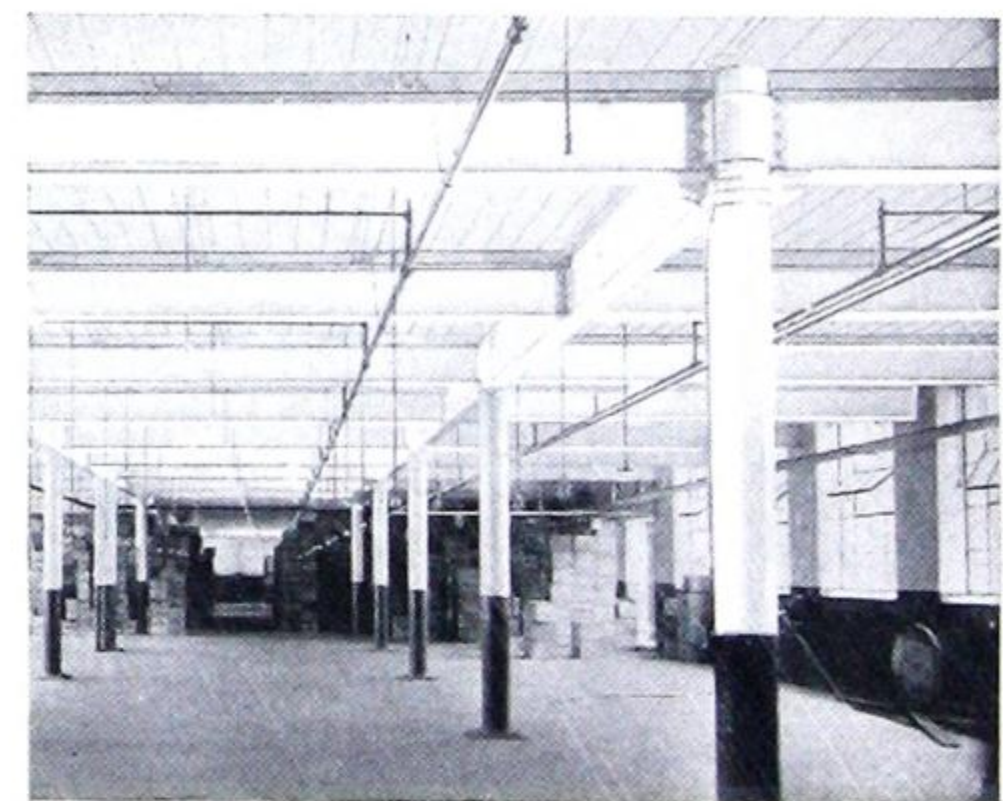
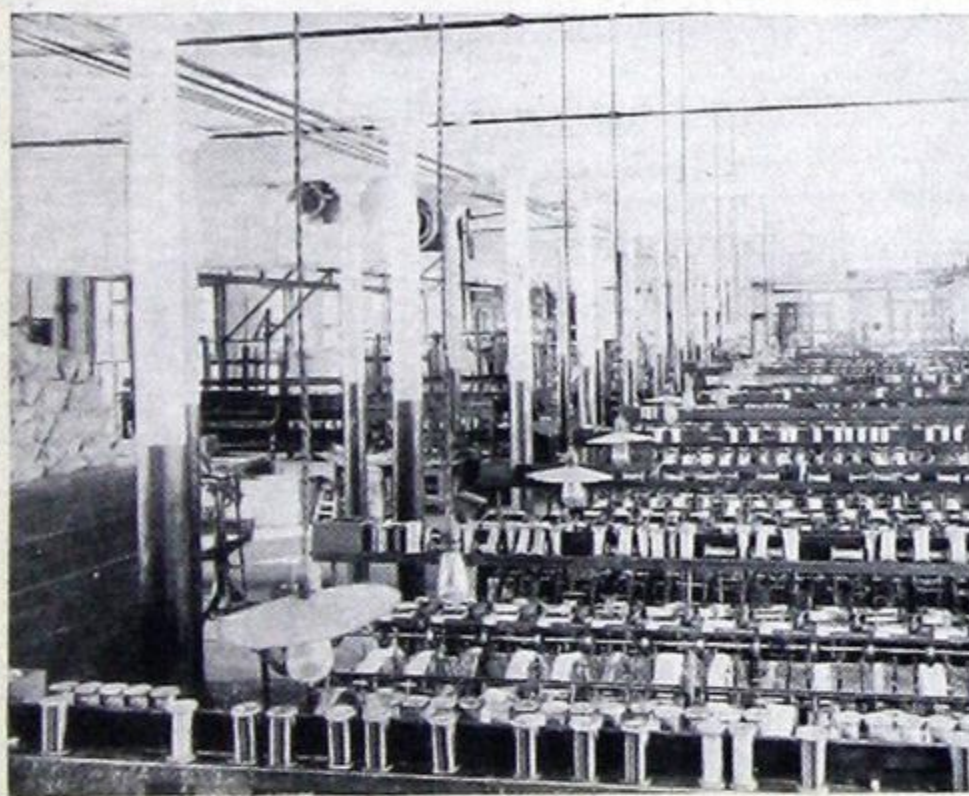
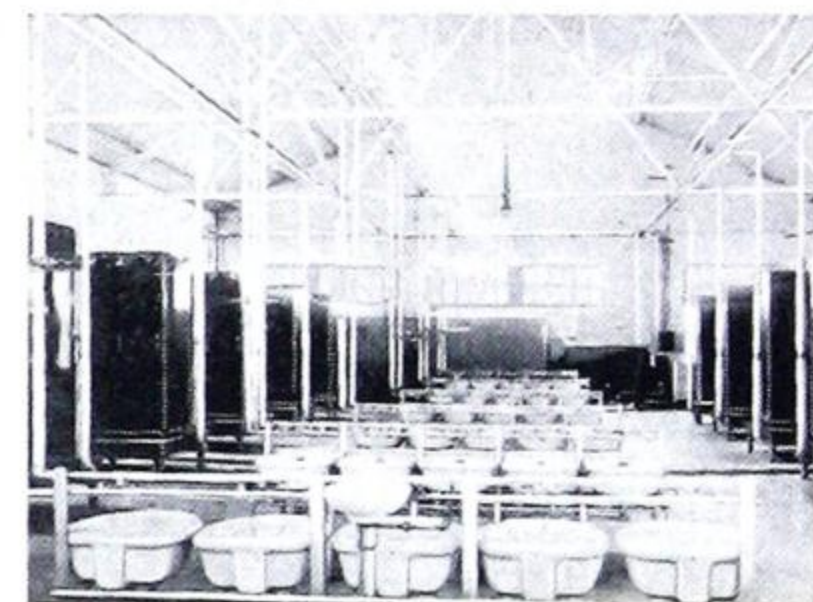


## Sta-White

*is the ideal paint for industrial interiors*



Automobile Plants  
Textile and Knitting Mills  
Silk Mills  
Food Product Plants  
Machine Shops  
Dairies and Creameries  
Packing Houses  
Laundries  
Paper Mills  
Rubber Plants  
Dye Manufacturers  
Storehouses  
Bakeries  
Woodworking Plants  
Pattern Shops  
Printing Plants  
Power Houses and Sub-Stations  
Service Stations and Garages  
Office-Buildings  
Apartment Houses  
Public Institutions  
Hotels  
Department Stores  
Toilet Rooms  
Hospitals  
Restaurants  
Elevator Shafts  
Tanneries  
Canneries



*White the year 'round*

Economically applied  
by air or brush



## SPECIFICATIONS FOR THE USE OF STA-WHITE

### NEW WORK OR UNPAINTED SURFACES

#### **Concrete, Brick, Plaster and Metal Surfaces:**

These shall be dry and free from dust or loosely attached matter.

The first or priming coat and the second or intermediate coat shall be Sta-White Primer evenly applied with a full brush.

The final coat shall be Sta-White gloss (semi-gloss, or flat finish as desired). This coat shall be brushed in the manner varnish is applied, i. e., flowed on rather than brushed out. Care shall be taken to see that paint does not sag.

**Wood Surfaces:** These surfaces shall be dry and free from dust or other loosely attached matter. Knots and sappy spots shall be shellaced before paint is applied.

The first or priming coat and the second or intermediate coat shall be Sta-White Primer evenly applied with a full brush.

The final coat shall be Sta-White Gloss (semi-gloss or flat finish as desired). This coat shall be brushed in the manner varnish is applied, i. e., flowed on rather than brushed out. Care shall be taken to see that the paint does not sag.

**Drying Time:** At least 48 hours shall be allowed between coats.

**Thinning:** For brick, concrete, plaster, or wood surfaces Sta-White Primer may be thinned with not to exceed one quart of turpentine or turpentine substitute (Petroleum Spirits) to the gallon of paint.

For steel, if the shop coat be a dark paint, the Primer shall be thinned with not to exceed one pint to the gallon. Finishing coat of Sta-White gloss (semi-gloss or flat) shall not be thinned under any circumstances.

**Two-Coat Work:** Where but two coats of paint are used, the first shall be Sta-White Primer, and

the final coat Sta-White Gloss (semi-gloss or flat, as desired). Specifications covering new work generally require the second coat of Primer (three coat work). The surface is better filled and long durability insured thereby.

All paint used shall be that manufactured by the Detroit Graphite Company, Detroit, U. S. A., and shall be delivered in unbroken packages. All work shall be subject to inspection and approval of the architect or engineer.

### REPAINTING

**Concrete, Brick, Plaster, Wood or Metal:** The surfaces shall be dry and free from dust or loosely attached matter such as old paint, rust, scale, etc. All oil spots shall first receive a coat of shellac.

The first or priming coat shall be Sta-White Primer applied with a full brush.

The final coat shall be Sta-White Gloss (semi-gloss or flat as desired), brushed in the manner varnish is applied, i. e., flowed on rather than brushed out. Care should be taken to see that the paint does not sag.

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*Economically applied by air or brush*



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CCA





**Detroit Graphite Company**  
Detroit, U. S. A.

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